

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/755,424	01/05/2001	Donald S. Guzik	1416.33US01	4784	
27367 7	7590 03/01/2005		EXAMINER		
WESTMAN CHAMPLIN & KELLY, P.A.			JOHNSON, JONATHAN J		
SUITE 1600 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH			ART UNIT	PAPER NUMBER	
MINNEAPOLIS, MN 55402-3319			1725		
			DATE MAILED: 03/01/200	DATE MAILED: 03/01/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/755,424	GUZIK, DONALD S.				
Office Action Summary	Examiner	Art Unit				
	Jonathan Johnson	1725				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replace of the period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be to solve within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	timely filed ays will be considered timely. m the mailing date of this communication. IED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 17 L	December 2004.					
,	s action is non-final.					
3) Since this application is in condition for allows) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) Claim(s) 1-60 is/are pending in the application 4a) Of the above claim(s) 2-5, 9, 13-45, 47-48 5) Claim(s) is/are allowed. 6) Claim(s) 1,6-8,10-12,46 and 49-60 is/are rejection is/are objected to. 8) Claim(s) 1-60 are subject to restriction and/or 	is/are withdrawn from considera	tion.				
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to by the	Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	• • • • • • • • • • • • • • • • • • • •	•				
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	its have been received. Its have been received in Applica prity documents have been receiv au (PCT Rule 17.2(a)).	ntion No ved in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:					

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 6-8, 10-12, 46, and 49-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (6,528,006) in view of Yamane et al. (5,875,004). With respect to Claims 1, 46, and 50-51, Jansen teaches a method for producing a prosthesis having at least partially cutting a material segment with a beam (abstract) where the target is a pericardial patch and chordae (col. 4, Il. 15-65 and col. 1, Il. 10-55), where the laser is programmed to cut only to a particular depth (col. 2, Il. 20-40). Yamane et al. teach a process control unit to compare the workpiece to correspond to a target image (Yumane et al.; Column 2, lines 40 through Column 4, Line 25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Jansen in order to utilize a process control method in order to automatically execute a visual inspection along the entire surface containing multiple points(Yumane et al.; column 1, lines 10-20).

With respect to Claim 6, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 1. Jansen teaches the target image has a leaflet section (Column 1, Lines 10-20).

Application/Control Number: 09/755,424 Page 3

Art Unit: 1725

With respect to Claim 7, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 1. Yamane et al. teach the target image is determined by a) forming a digital image of the material segment (Column 5, Lines 59-60); b) comparing the digital image to a target image to evaluate the difference between the digital image and the target image (Column 5, Lines 60-65); and c) determining a cutting pattern based on the difference (Column 6, lines 5-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Jansen in order to utilize a process control method in order to automatically execute a visual inspection (Yamane et al.; column 1, lines 10-20).

With respect to Claim 8, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 7. Yamane et al. teach the digital image is formed using a video camera (Column 5, Lines 60 through Column 6, lines 17). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Jansen in order to utilize a video camera in order to automatically execute a visual inspection (Yamane et al.; column 1, lines 10-20).

With respect to Claim 10, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 7. Yamane et al. teach the cutting pattern involves forming the cutting pattern based on the border between the digital image and the target image (Column 6, Lines 5-17). It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the method of Jansen in order to utilize a process control method in order to automatically execute a visual inspection (Yamane et al.; column 1, lines 10-20).

With respect to Claim 11, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 7. Yamane et al. teach the cutting pattern is selected to avoid cutting any material that forms a portion of the target object (Yamane et al; column 6, Lines 5-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Jansen in order to utilize a process control method in order to automatically execute a visual inspection (Yamane et al.; column 1, lines 10-20).

With respect to Claim 12, the teachings of Jansen and Yamane et al. are the same as relied upon in the rejection of Claim 7. Yamane et al. teach orienting the digital image relative to the target image prior to comparing the digital image with the target image (Yamane et al.; column 5, line 55 through column 6, Line 20).

With respect to Claims 49 and 52-60, Jansen teaches cutting the tissue sheet to separate portions of the tissue sheet with a thickness outside of a selected range; wherein the imaging is performed with a laser (abstract and Column 1, lines 14-20); where the cutting is controlled by a process control unit (col. 4, ll. 40-50); wherein the target image is a leaflet section or pericardial patch or chordae (col. 4, ll. 15-45 and col. 1, ll. 10-55). Yamane et al. teach the cutting is controlled by a process control unit to cut the material to correspond to a target image; wherein the selected range is provided by a target image; wherein the tissue sheet produces a digital

Art Unit: 1725

image, which is oriented proper direction. (Yumane et al.; Column 2, lines 40 through Column 4, Line 25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Jansen in order to utilize a process control method in order to automatically execute a visual inspection (Yumane et al.; column 1, lines 10-20).

Response to Arguments

Applicant's arguments with respect to claims 1, 6-8, 10-12, 46, and 49-60 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/755,424

Art Unit: 1725

Jonathan Johnson Primary Examiner Art Unit 1725 Page 6

jj